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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,637	12/20/2000	Pantelis Monogioudis	12-31	5635

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EXAMINER

MILLER, BRANDON J

ART UNIT	PAPER NUMBER
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2683

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DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/741,637	MONOGIOUDIS ET AL.	
	Examiner	Art Unit	
	Brandon J Miller	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-9, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang in view of Corbett.

Regarding claim 1 Kang teaches a method for use in wireless equipment, including receiving user channel transmit power information from base stations involved in a soft handoff with user equipment (see col. 4, lines 35-38). Kang teaches receiving information from the user equipment, the information received from the user equipment including a value that exceeds a signal-to-noise ratio determined by the user equipment as a function of a target signal-to-noise ratio value and a signal-to-noise ratio value of one or more user channel signals received at the user equipment (see col. 5, lines 34-38). Kang teaches wireless equipment that determines a transmit power level for use by the base stations as a function of the received user channel transmit power information and the received information from the user equipment (see col. 5, lines 54-64). Kang does not specifically teach wireless equipment determining a reference user transmit power level. Corbett teaches wireless equipment determining a reference user transmit power level (see col. 3, lines 23-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to specifically include wireless equipment determining a reference user transmit power level because this would allow for

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determination of a reference power level for diversity handover base stations in downlink transmit power control.

Regarding claim 3 Kang teaches a value that exceeds a signal-to-noise ratio determined as a function of a target signal-to-noise ratio value (see col. 5, lines 34-38) and a signal-to-noise ratio value of a user channel signal received from one of the base stations that is stronger than the user channel signal received from another base stations (see col. 5, lines 41-44).

Regarding claim 4 Kang teaches a method for use in wireless equipment, including receiving user channel transmit power information from base stations involved in a soft handoff with user equipment (see col. 4, lines 35-38). Kang teaches determining a downlink transmit power from a received user channel transmit power information and received information from user equipment; and transmitting a determined downlink reference power to a base station (see col. 5, lines 25-32 & 35-38). Kang teaches an identifier of a base station with a received signal at user equipment that is stronger than the received signal of other base stations and a signal-to-noise ratio value of the signal received from the identified base station (see col. 5, lines 41-53). Kang does not specifically teach transmitting and determining a reference user transmit power level. Corbett teaches wireless equipment determining a reference user transmit power level (see col. 3, lines 23-26). It would have been obvious at the time the invention was made to make the invention adapt to include transmitting and determining a reference user transmit power level because this would allow for correct transmit power to be selected for obtaining a required signal-to-noise ratio in communications between user equipment and several base stations.

Regarding claim 5 Kang teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

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Regarding claim 6 Kang teaches a method for use in wireless equipment during in a soft handoff with wireless equipment (see col. 4, lines 35-38). Kang teaches identifying a base station with a received signal at the wireless equipment that is stronger than the received signal of one or more of the other base stations (see col. 5, lines 38-51). Kang teaches calculating a signal-to-noise ratio value of the signal received from the identified base station (see col. 38-43). Kang does not specifically teach transmitting the identity of the identified base station and the calculated signal-to-noise ratio value to a control point of a wireless system. Corbett teaches transmitting the identity of a base station to a control point of a wireless system (see col. 7, lines 51-55 and col. 8, lines 34-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include transmitting the identity of the identified base station and the calculated signal-to-noise ratio value to a control point of a wireless system because this would allow for correct transmit power to be selected for obtaining a required signal-to-noise ratio in communications between user equipment and several base stations.

Regarding claim 7 Corbett teaches a common control point (see col. 5, lines 1-7).

Regarding claim 8 Kang teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 9 Kang teaches a method for use in wireless equipment, including receiving user channel transmit power information from base stations involved in a soft handoff with user equipment and receiving information from user equipment (see col. 4, lines 35-38). Kang teaches determining a transmit power level for use by the base stations as a function of the received user channel transmit power information and the received information from the user

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equipment (see col. 5, lines 54-64). Kang teaches information received from user equipment that includes at least one parameter that is a function of a signal-to-noise ration measured in the user equipment for user channel signals received by the user equipment (see col. 5, lines 34-38).

Kang does not specifically teach a processor for determining a reference user transmit power level for use by the base station. Corbett teaches a processor for determining a reference user transmit power level for use by the base station (see col. 3, lines 23-26 and col. 9, lines 17-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to specifically include a processor for determining a reference user transmit power level for use by the base station because this would allow for determination of a reference power level for diversity handover base stations in downlink transmit power control.

Regarding claim 11 Kang teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 12 Kang teaches an apparatus for use in wireless equipment including transceiver for receiving user channel transmit power information from base stations involved in a soft handoff with user equipment (see col. 4, lines 2-7 & 35-38). Kang teaches receiving information from the user signal at user equipment that is stronger than the received signal of one or more other base stations and a signal-to-noise ratio value determined by the user equipment for the user channel signal received from an identified base station and transmitting the downlink power to the base stations (see col. 5, lines 41-53). Kang does not specifically teach a processor for determining a reference user transmit power level for use by the base station. Corbett teaches a processor for determining a reference user transmit power level for use by the base station (see col. 3, lines 23-26 and col. 9, lines 17-20). It would have been obvious to one of ordinary skill in

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the art at the time the invention was made to make the invention adapt to a processor for determining a reference user transmit power level for use by the base station because this would allow for correct transmit power to be selected for obtaining a required signal-to-noise ratio in communications between user equipment and several base stations.

Regarding claim 13 Kang teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 14 Kang teaches a method for use in wireless equipment during in a soft handoff with a number of base stations, with wireless equipment (see col. 4, lines 35-38). Kang teaches identifying a base station with a received signal at the user equipment stronger than the received signal of one or more of the other base stations (see col. 5, lines 38-51). Kang teaches calculating a signal-to-noise ratio value of the signal received from the identified base station (see col. 38-43). Kang does not specifically teach transmitting the identity of the identified base station and the calculated signal-to-noise ratio value to a control point of a wireless system. Corbett teaches transmitting the identity of a base station to a control point of a wireless system (see col. 7, lines 51-55 and col. 8, lines 34-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include transmitting the identity of the identified base station and the calculated signal-to-noise ratio value to a control point of a wireless system because this would allow for correct transmit power to be selected for obtaining a required signal-to-noise ratio in communications between user equipment and several base stations.

Regarding claim 15 Corbett teaches a device as recited in claim 7 and is rejected given the same reasoning as above.

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Regarding claim 16 Kang teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang in view of Corbett and Korpela.

Regarding claim 17 Kang teaches at least one bit for conveying data representative of an identifier for identifying a base station whose received signal at a user equipment is stronger than signals received at the user equipment from one or more other base stations (see col. 5, lines 41-52). Kang teaches conveying data representative of a value associated with a signal-to-noise measure of a received signal from an identified base station at the user equipment (see col. 2, lines 38-45). Kang does not specifically mention a transmission frame representing data embodied in a wireless transmission signal. Corbett teaches one or more bits, which indicate a desired increase in transmit power or any bit assignment possible (see col. 6, lines 31-35). Korpela teaches a transmission frame representing data embodied in a wireless transmission (see col. 6, lines 25-28 and Fig. 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include mention a transmission frame representing data embodied in a wireless transmission signal because this would allow for dynamic adjustment of power control that attempts to maintain either the transmit power of a signal or the signal-to-noise ratio above a threshold.

Regarding claim 18 Korpela teaches a radio resource control based protocol (see col. 5, lines 35-38).

Regarding claim 19 Korpela teaches physical layer signaling (see col. 2, lines 10-15).

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Regarding claim 20 Kang teaches a value that exceeds a signal-to-noise ratio determined as a function of a target signal-to-noise ratio value (see col. 5, lines 34-38) and a signal-to-noise ratio for the strongest received user channel transmit power signal (see col. 5, lines 41-44).

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Soliman U.S Patent No. 6,490,460 discloses forward and reverse link power control using position and mobility information.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

January 7, 2004



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600